

AMENDMENTS TO THE SPECIFICATION

After page 55, before the listing of the claims, please add the pages of the Sequence Listing submitted herewith.

On page 37, lines 2-28, please amend the paragraph as follows:

Generation of p53 shRNA retroviruses-p53 hairpin oligos were designed using designated software found at <http://katahdin.cshl.org:9331/RNAi/>. The hairpins described in this application have the following sequence: p53-1-
 AAAAAGGTCTAAGTGGAGCCCTTCGAGTGTTAGAAGCTTGTGACACTCG
 GAGGGCTTCACTTGGGCCCCGGTGTTCGTCCTTTCCACAA (SEQ. ID. NO:1) ~~AND~~ and p53-2-
 AAAAAAACATCCGACTGCGACTCCTCCATAGCAGCAAGCTTCCTGCCA
 TGGAGGAGTCACAGTCGGATATCGGTGTTTCGTCCTTTCCACAA (SEQ. ID. NO:2). To generate hairpin sequences downstream of U6 promoter, PCR reactions were run using a pGEM U6 promoter template (provided by Greg Hannon), the p53 hairpin primers and a CACC-SP6 reverse primer with the following sequence: CACCGATTTAGGTGACACTATAG (SEQ. ID. NO:3). The PCR conditions were the following: 100ng pGEM U6 plasmid, 1 μ M p53 hairpin primer, 1 μ M SP6, 1x Perkin-Elmer PCR reaction buffer (with 15mM MgCl₂), 4% DMSO, .25mM dNTPs and 5 Units of taq DNA polymerase. Reactions were run for 1x 95 degrees for 5 minutes, 30 cycles of 95 degrees 30", 55 degrees 30" and 72 degrees 1'. PCR products were then blunted by incubating at 72 degrees for 10 minutes in the presence of 2 units of pfu DNA polymerase. PCR products were cloned directly into a pENTR/TOPO-D vector (Invitrogen), using the company specifications. Plasmids containing the PCR product were cut with EcoRV and gel extracted. The cut plasmid was placed into a "Gateway™" reaction (Invitrogen) reaction with a retroviral vector containing a "Gateway™ destination cassette" and the Gateway™ BP clonase enzyme mix. The reaction was performed as specified in the Gateway™ BP clonase enzyme product literature. Retroviral vectors containing destination cassettes were created as follows: pBabe Puro was cut with NheI and a linear reading frame cassette A (Gibco/Brl) fragment was blunt-end ligated into the cut vector in the 3' LTR. MSCV puro (Clontech) was cut with HpaI and a linear reading frame cassette A was blunt-end ligated into the cut vector upstream of the PGK promoter.

On page 42, line 15 to page 16, line 6, please amend the paragraph as follows:

Bim and Puma shRNA constructs were created as described for the shp53 constructs. The primers used to create Bim shRNAs were:

mBim-1 -

AAAAAAATCACACTCAGAACTCACACCAGAAGGCTCAAGCTTCAACCTT
CTGATGTAAGTTCTGAGTGTGACGGTGTTCGTCCTTTCCACAA (SEQ. ID. NO:4)

mBim-2 -

AAAAAAAAGAGTAGTCTTCAGCCTCGCAGTAATCACAAGCTTCTGATTA
CCGCGAGGCTGAAGACCACCCTCGGTGTTTCGTCCTTTCCACAA (SEQ. ID. NO:5)

mBim-3-

AAAAAAGAGATAGGGACCCCAAGCCTGAGCTGGAGCAAGCTTCCCCCA
GCTCAGGCCTGGGGCCCCTACCTCGGTGTTTCGTCCTTTCCACAA (SEQ. ID. NO:6)

The primers used to create Puma shRNAs were:

mPUMA-1 -

AAAAAAGAGAGCCGCCCTCCTAGCATGCGCAGGCCCAAGCTTCGGCCCG
CGCACGCCAGGAGGGCAGCTCTCGGTGTTTCGTCCTTTCCACAA (SEQ. ID. NO:7)

mPUMA-2-

AAAAAAGGGACTCCAAGATCCCTGAGTAAGAGGAGCAAGCTTCCTCCCC
TTACCCAGGGATCCTGGAGCCCCGGTGTTTCGTCCTTTCCACAA (SEQ. ID. NO:8)

mPUMA-3-

AAAAAAGGGAGGGCTAAGGACCGTCCGAGCACGAGCAAGCTTCCCCGC
GCCCGGACGGTCCTCAGCCCTCCCGGTGTTTCGTCCTTTCCACAA (SEQ. ID. NO:9)

On page 43, lines 13-19, please amend the paragraph as follows:

Mice receiving MSCV Puro Bim shRNA and MSCV Puro-IRES-GFP Puma shRNA developed lymphomas at a significantly higher penetrance and shorter onset time than mice receiving control vector (Figure 11A). RT-PCR of total RNA was performed on tumors from mice receiving control or MSCV Puro Bim shRNA vectors, using the following primers:

mBim5'-XhoI CCGCTCGAGGCCACCATGGCCAAGCAACCTTCTGATG (SEQ. ID. NO:10)

mBim3'-EcoRI CCGGAATTCTCAATGCCTTCTCCATACCAGACG (SEQ. ID. NO:11)